

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Claims 17-24 remain pending in the present application. Claims 21-24 have been withdrawn from consideration.

Claim 17 stands rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art (page 1 of the specification) in view of U.S. Patent No. 5,902,276 to Namey (“the ‘276 patent”). In addition, claims 18 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of the ‘276 patent, and in further view of U.S. Patent No. 4,971,051 to Toffolon (“the ‘051 patent”). Finally, claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of the ‘276 patent, and in further view of U.S. Patent No. 2,664,887 to Green (“the ‘887 patent”). Applicant respectfully traverses these rejections for the reasons presented below.

The ‘276 patent teaches a two-shot molding technique that is used to bond a rubber cover 32 over a hard core 30 - resulting on a plunger head for use in a syringe. Those skilled in the art understand that in order to ensure a sufficient bond between two materials using the two-shot molding technique requires that there be a relatively large surface area (contacting area) between the rubber cover that is to be bonded to the hard core. For this reason, a plurality of cavities 36 and 38 are provided in the core. See FIG. 3 from the ‘276 patent. In the present invention, however, the seal is bonded to the mask body over a relative small area, namely the rim of the mask body. See items 48 and 50 in FIG. 4B of the present application.

Independent claim 1 has been amended to clarify this feature of the present invention. Namely, claim 1, as amended, recites, that the “mask seal member is molecularly bonded to the rim as a consequence of the second material being injected into the mask mold”. Applicant submits that one skilled in art would not be motivated to use the two-shot molding technique of the ‘276 patent because the sealing area is too small.

In addition, the bond between the seal and the mask body in the present invention must be an gas-tight bond, i.e., a bond that does not allow gas, such as air to leak from the area where the seal joins the mask body. While the two-shot molding technique of the '276 patent is believed to provide a strong attachment between the two materials, one skilled in the art would not have appreciated whether this attachment would also be gas-tight, especially given the relative small bonding area available in the mask body and seal configuration of the present invention. Independent claim 1 has also been amended to clarify that the bond between the rim and the mask seal is a gas-tight seal. For these reasons, applicant submits that one skilled in the art of mask molding would not look to the two-shot injection molding technique used for syringes to solve the problems in the mask field, and would not be motivated to make the combination suggested by the Examiner.

For the reasons presented above, applicant respectfully submits that independent claim 17 is not rendered obvious by the cited references. In addition, claims 18-20 are also not rendered obvious due to their dependency from independent claim 17. Accordingly, applicant respectfully requests that the above rejections of claim 17-20 be withdrawn.

All objections and rejections have been addressed. It is respectfully submitted that the present application is in condition for allowance and a Notice to the effect is earnestly solicited.

Respectfully submitted,

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